

## INTERNATIONAL SEARCH REPORT

Intern: Application No  
PCT/EP 03/12781A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C23G5/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C23G B21B B08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 406 550 B1 (FELDBAUER ET AL) 18 June 2002 (2002-06-18)  abstract column 1, line 41 - line 61 column 2, line 15 -column 3, line 53 column 4, line 14 -column 7, line 39; figures  --- -/--	1,7-12, 14, 16-19, 23,24, 26,27, 32,34

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

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Date of the actual completion of the international search

26 March 2004

Date of mailing of the international search report

01/04/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 195 19 544 A (SUNDWIGER EISENHÜTTE MASCHINENFABRIK GMBH & CO) 28 November 1996 (1996-11-28) abstract column 1, line 3 - line 9 column 2, line 3 - line 31 column 4, line 28 -column 6, line 48; figures -----	1,18
A	US 4 576 837 A (TARANCON ET AL) 18 March 1986 (1986-03-18) abstract column 1, line 24 -column 2, line 41; figure -----	1,18

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Internat Application No

PCT/ <sub>EP</sub> 03/12781

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6406550	B1	18-06-2002	US 6217666 B1 17-04-2001
			AU 6521801 A 11-12-2001
			WO 0191929 A1 06-12-2001
			US 2002083962 A1 04-07-2002
			AU 747309 B2 16-05-2002
			AU 4091799 A 21-03-2000
			CA 2341669 A1 09-03-2000
			CZ 20010651 A3 12-12-2001
			EP 1124653 A1 22-08-2001
			SK 2672001 A3 11-09-2001
			WO 0012233 A1 09-03-2000
			US 2001011546 A1 09-08-2001
DE 19519544	A	28-11-1996	WO 9749507 A1 31-12-1997
			DE 19519544 A1 28-11-1996
			EP 0918579 A1 02-06-1999
			ES 2169805 T3 16-07-2002
			JP 2000514002 T 24-10-2000
			US 6134811 A 24-10-2000
US 4576837	A	18-03-1986	NONE